

**METHOD AND APPARATUS FOR DETECTING FINGER MERGE
CONDITION IN CDMA RECEIVER****ABSTRACT**

Techniques are described whereby noise estimates from individual finger processors are compared using a noise estimator, and a finger merge condition declared on the basis of such comparison. In one embodiment, when noise estimates from two or more finger processors is identical or nearly identical, finger merge is presumed such that noise estimates from merged fingers are blocked from forming a combined noise estimate. Furthermore, in another scheme a correcting factor is introduced to account for the correlation between noise samples from merged fingers. In a further embodiment, a computationally effective procedure to perform comparisons between the noise estimates from individual fingers is implemented by sorting noise estimates according to respective magnitudes to create a sort list. In one implementation, only samples that are neighbors in the sorted list are then compared. The techniques described may be implemented to mitigate the problem of noise under-estimation in a finger merge condition, particularly as relates in the context of signal quality estimation for purposes of fast forward power control.